Perkins&Will

Road Map for Return

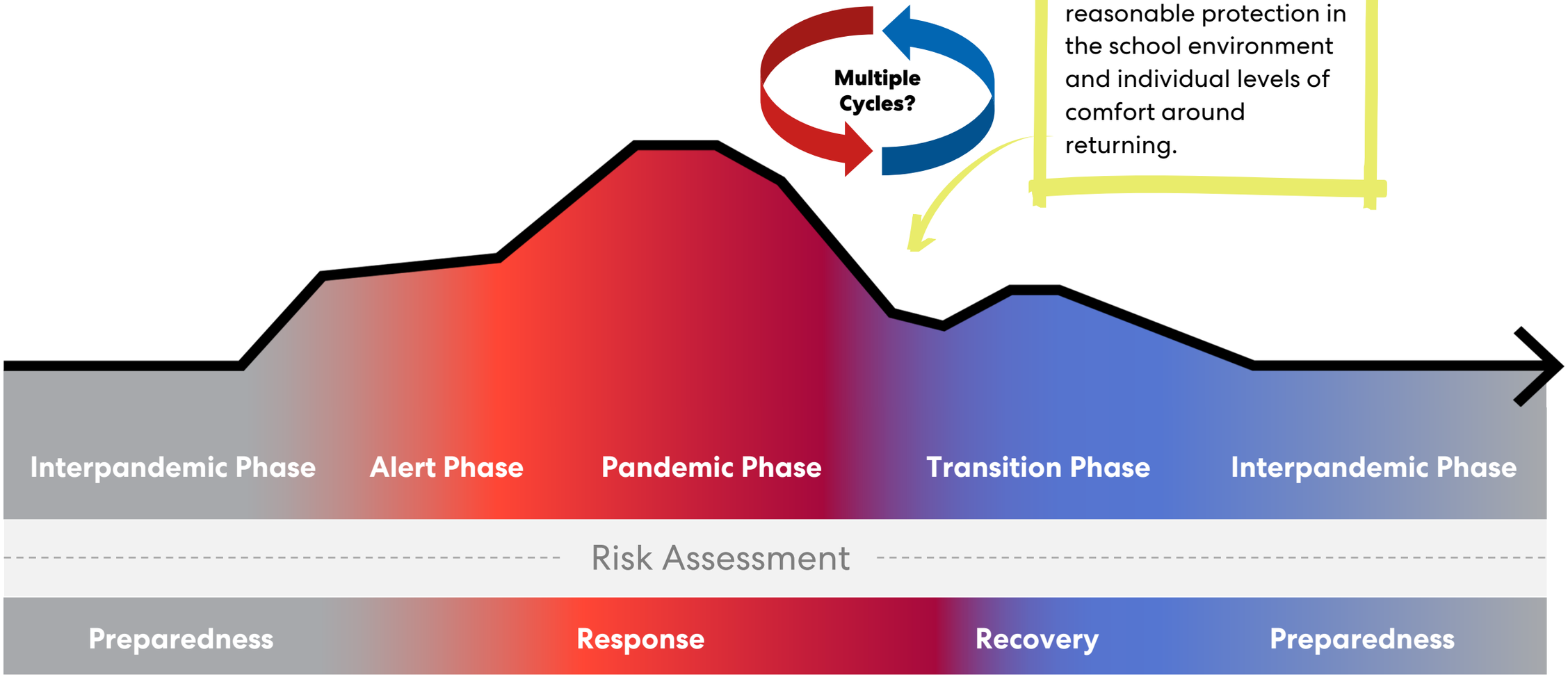
Guidance for a return to school during COVID-19

Phases of the Pandemic

Our current focus is on the “Transition” phase

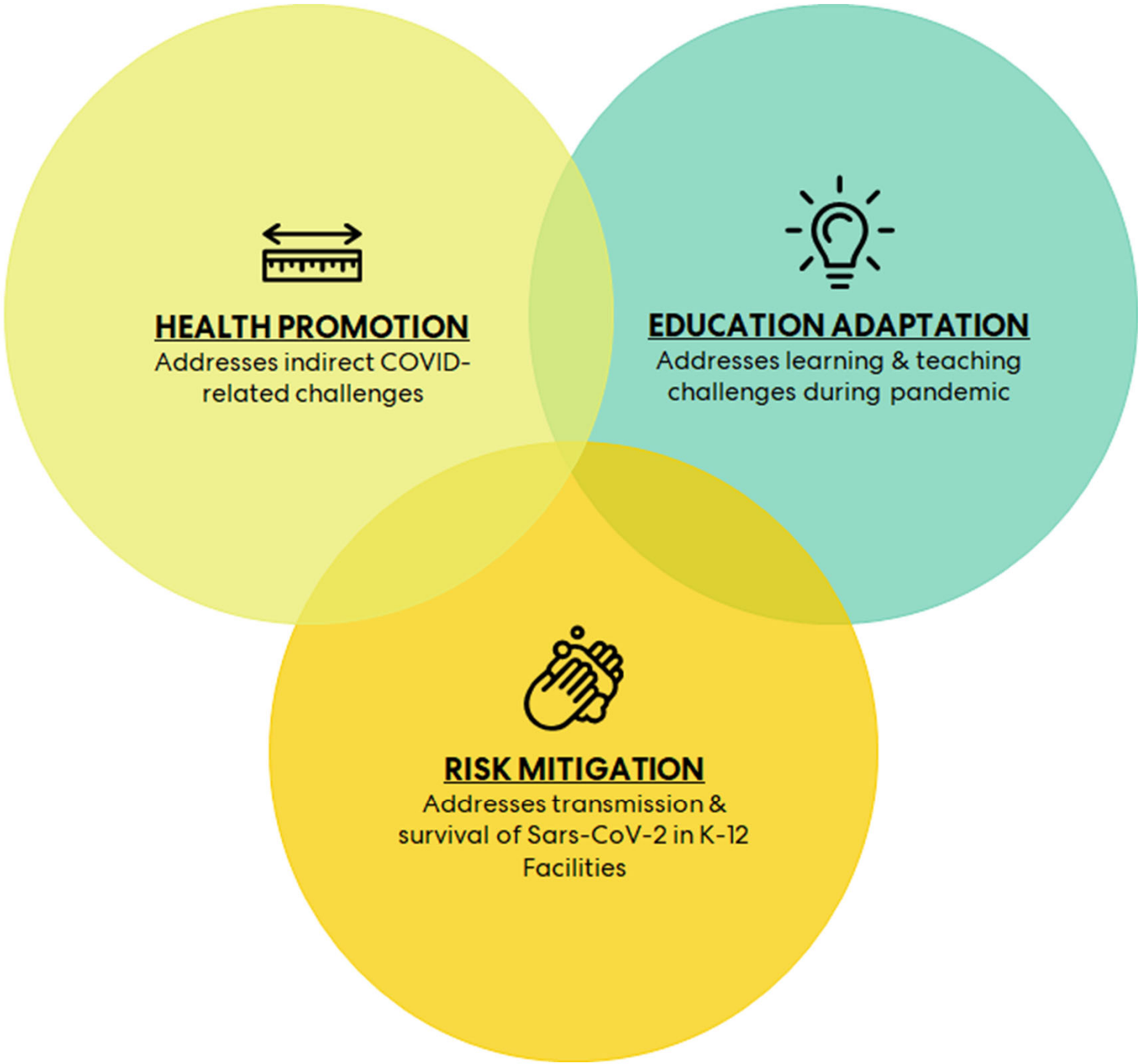
Transition

Best practices are established to address reasonable protection in the school environment and individual levels of comfort around returning.



Repopulating K-12 schools requires a holistic approach that promotes health and safety without compromising students' learning potential.

Holistic Framework



Risk Mitigation

Strategies for reducing COVID-19 transmission and cross-contamination through design, disinfection and cleaning.

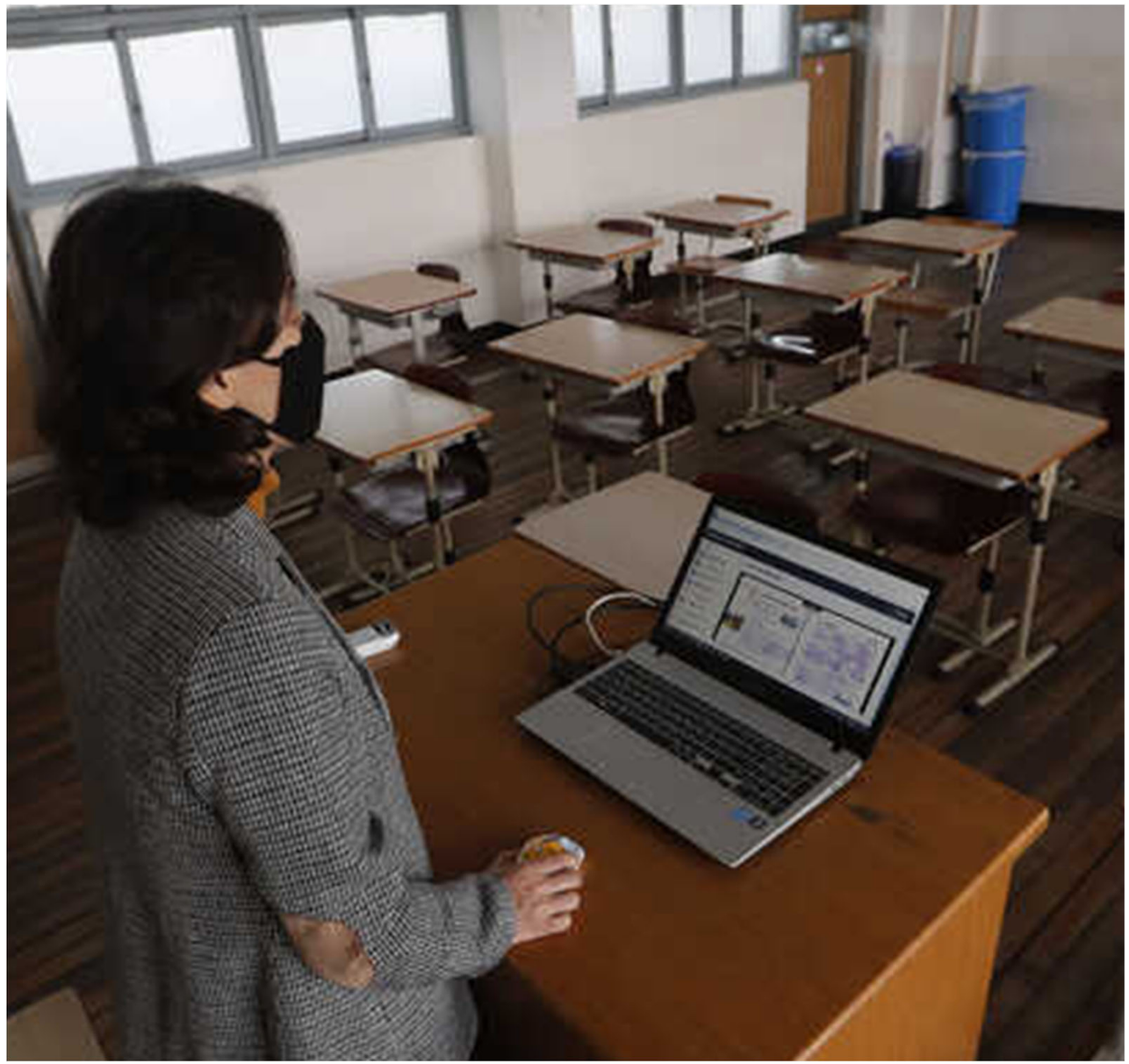
→ Student at Yangzheng Primary School in China

Educational Adaptation

These strategies promote effective learning and teaching in this new normal through behavioral, logistical, and technology changes.

→

South Korea Reopens Schools



Health Promotion

Strategies that promote physical and mental health, social cohesion, and a sense of belonging and safety.

→

Teacher holds a music lesson outdoors in Randers, Denmark

Example Timeline

Steps for Repopulating Schools

	Starting Now	Summer	Fall	
Risk Mitigation 	Determine capacity of classrooms Identify addition space needs Confirm cleaning/ disinfecting and design protocols	Implement design measures for compliance.	Review Design Implementation measures. Regular deep cleaning of high touch areas	
Education Adaptation 	Example: Adjust schedule by classroom Create protocol for drop-off/pick-up Adapt large spaces for learning	Establish flexible attendance Mark hallway flow Blended classrooms (virtual/in-person)	Limit technology sharing Limit external volunteers Provide PPE protocols Outdoor recess/PE	**Revise & Evolve Protocols, Plans & Policies**
Health Promotion 	Establish food service protocols Survey students for health concerns Identify COVID officer. Outline Social Emotional care.	Implement SEL practices	Increase services & counselors available	

How do you go back to school safely?

Establish policies that promote learning, health & safety

Communicate with your community & get feedback

Procure & Implement plan for returning to school

Return to School

We cannot remove all risks.

Home → **Transit to School** → **Entering School** → **Teaching Spaces**

Working parents

Social engagements

Multi-generational living

Public transportation

School bus density / contamination

Contaminated high touch surfaces

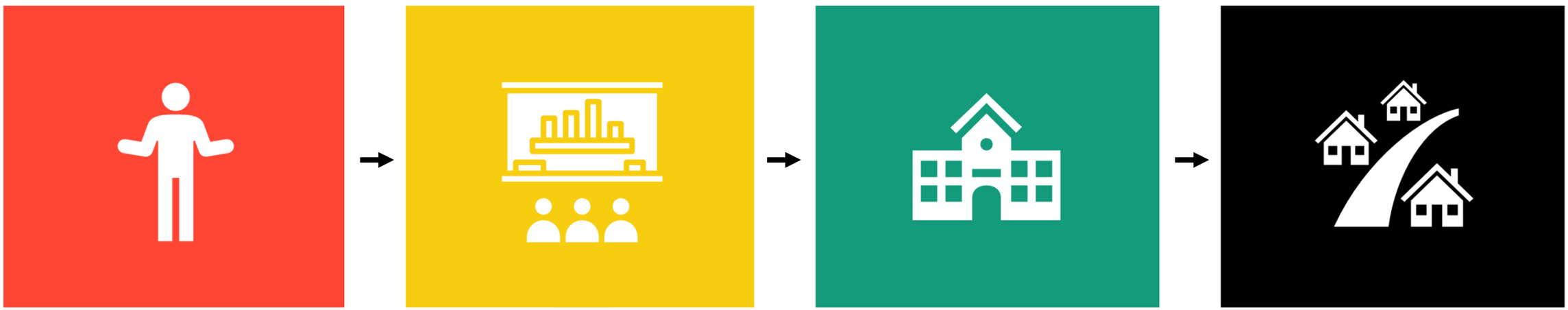
Fail to socially distance

Public spaces (bathrooms, lockers, lobby, etc.)

Surface contamination

Recirculating air

Strategies at Every Level



Individual

- Personal Protection
- Behavioral

Room Specific

- Social Distancing
- Reduce Surface Contamination

School-wide

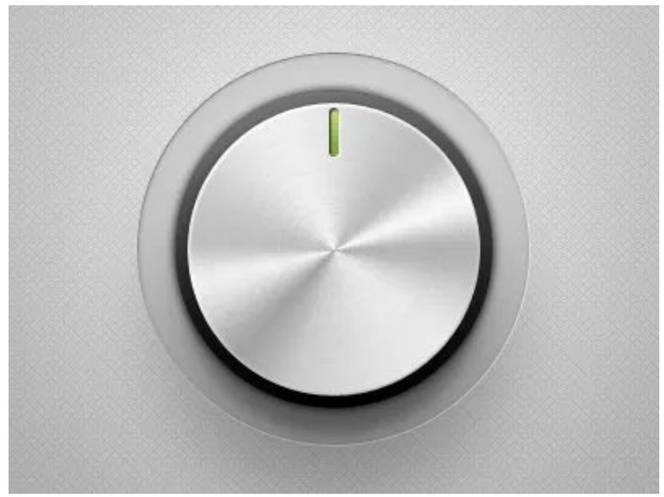
- Air Quality Improvements
- Scheduling
- Reduce High-Touch Surfaces

District or State-Level

- Shelter-in-place Policies
- District Building Closures

Mindset

It’s not this . . .



. . . but this

Capacity Guidelines

Physical Distancing Capacity Guidelines

A. Instructional Spaces
1. General Classrooms
2. Science
3. Art
4. Etc.

B. Administrative Spaces
1. Offices
2. Conference Rooms

C. Common Spaces
1. Cafeteria
2. Auditorium
3. Gym
4. Corridors
5. Building Entry

D. Other Spaces
1. Bus

“Select strategies based on feasibility given the unique space and needs of the school. **Not all strategies will be feasible for all schools.** ”

-CDC, “Interim Guidance for Administrators of US K-12 Schools and Child Care Programs”

Capacity Analysis Process

Classroom Capacity

# of student desks with physical distancing guidelines

Current Schedule

# of students scheduled to be in class during each period

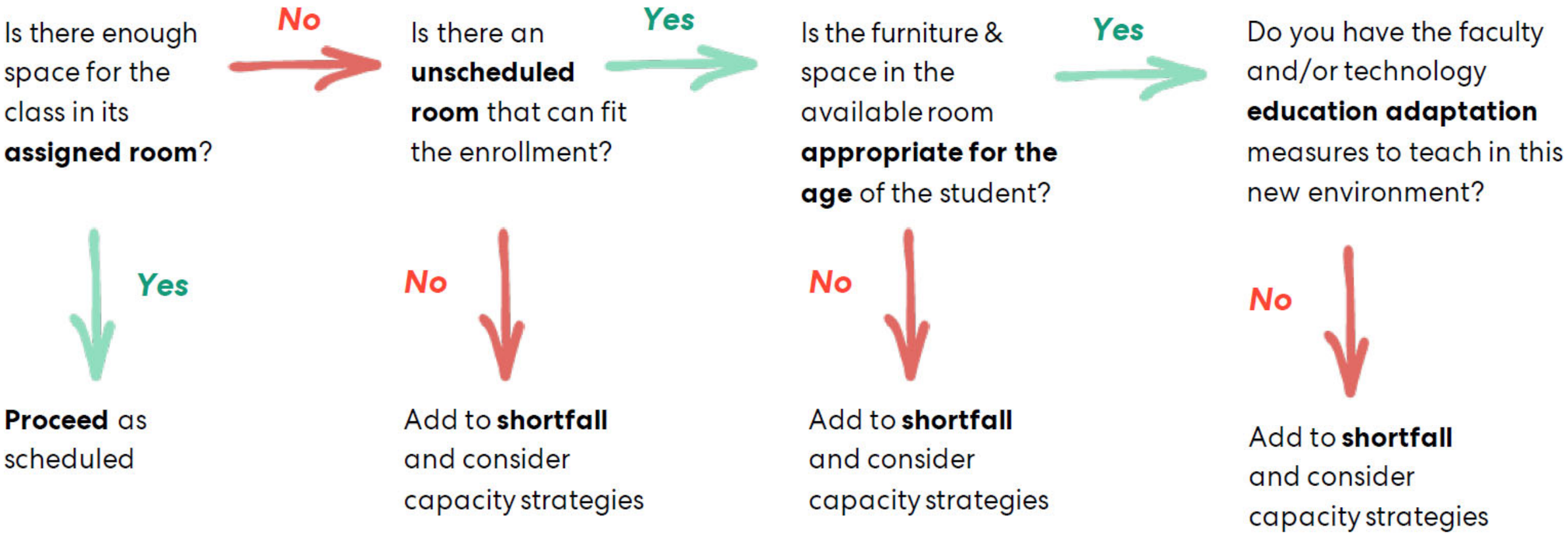
Shortfall

# of students who don't fit in the classroom after accounting for physical distancing

Next Step: Strategies

Options for making up the shortfall, either by new delivery models or creating additional instruction space

Capacity and adaptation decisions



Instructional Spaces

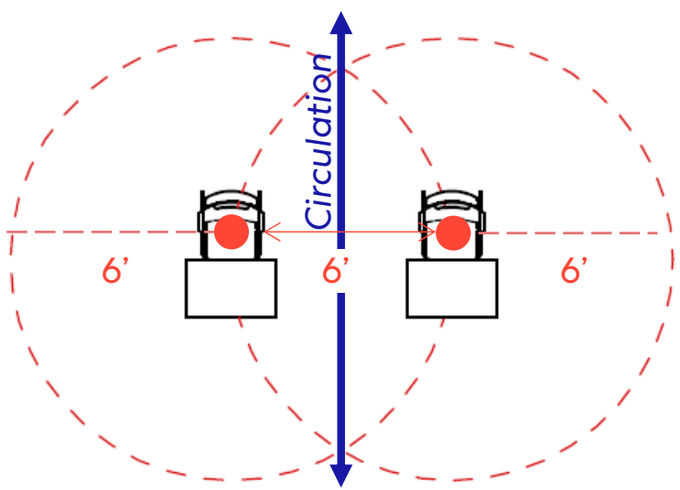
Classroom Layout Guidelines

Space student desks 6’ apart to support recommended CDC physical distancing guidelines

Minimum

For schools with lower infection risk or greater capacity need

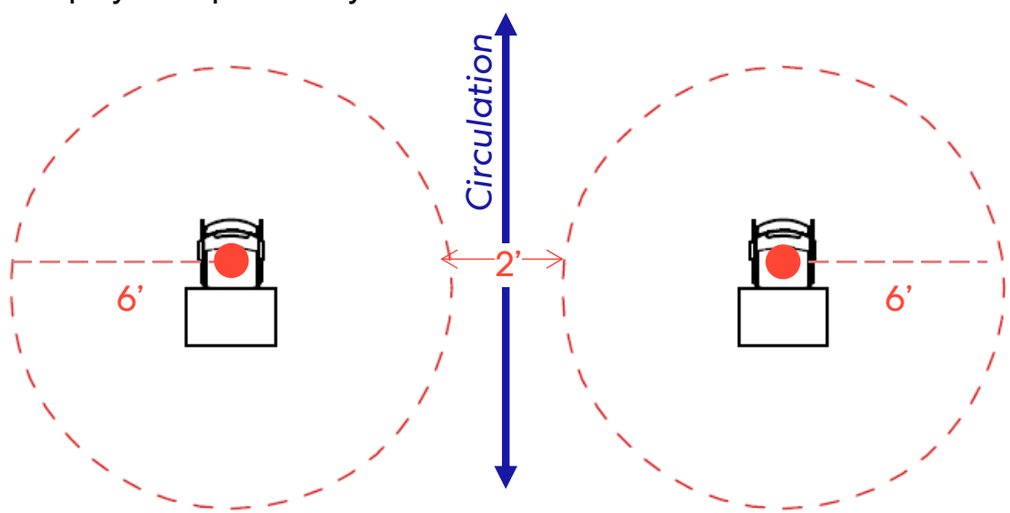
- Provide a 6’ radius around all student desks when students are in a stationary **seated position**.
- The 6’ radius around each desk **can include circulation** space required to access each desk. Students may need to pass through the 6’ area on the way to their desk



More Ideal Scenario

For schools with higher infection risk or lower capacity need

- Provide a 6’ radius around all student desks **at all times**
- Provide an **aisle** between each 6’ radius so students can circulate through the room without encroaching on another student’s 6’ radius
- Greatly reduces classroom capacity but minimizes risk of physical proximity



Classroom Layout Guidelines for COVID Transition

Designate a **sanitation station** near the door with hand sanitizer, disinfectant wipes, paper towels, and a waste bin

Provide 6' of clear **teaching space** at the front

Consider a **plexiglass shield** at the teacher's desk. *Note: some state governments have suggested that the teacher face the same direction i.e. away from the students. We are evaluating whether this is feasible for teaching and classroom management.*

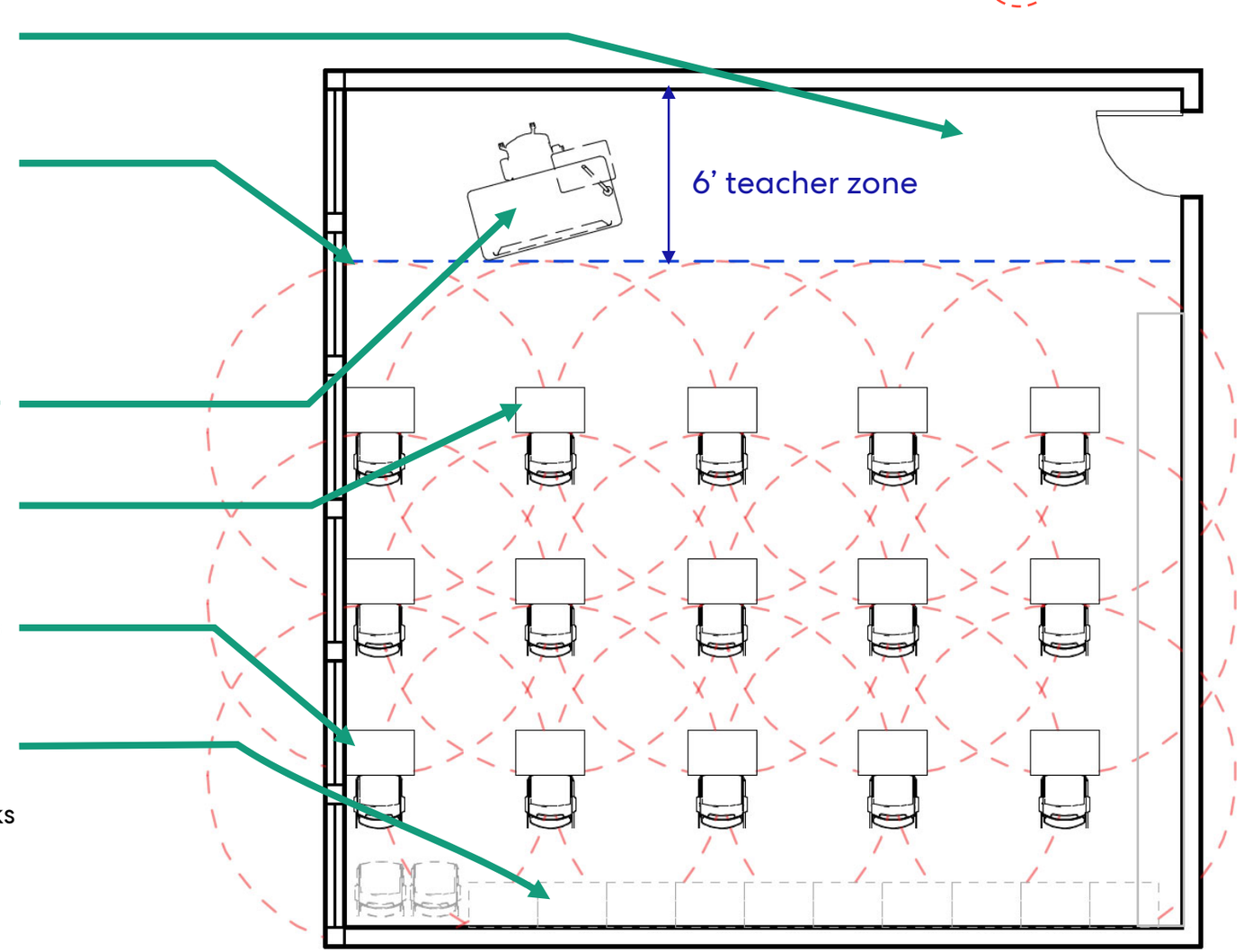
Consider removing **desks directly in front of the teacher** station (or protect teacher station with plex barrier)

Where possible, place **desks against the wall** to maximize capacity and reduce risk of physical proximity on one side

Option: Create a **zone to stack unused chairs and desks** that have been removed

Use **tape, stickers, and signage** to indicate traffic flow, physical distances, and unused desks.

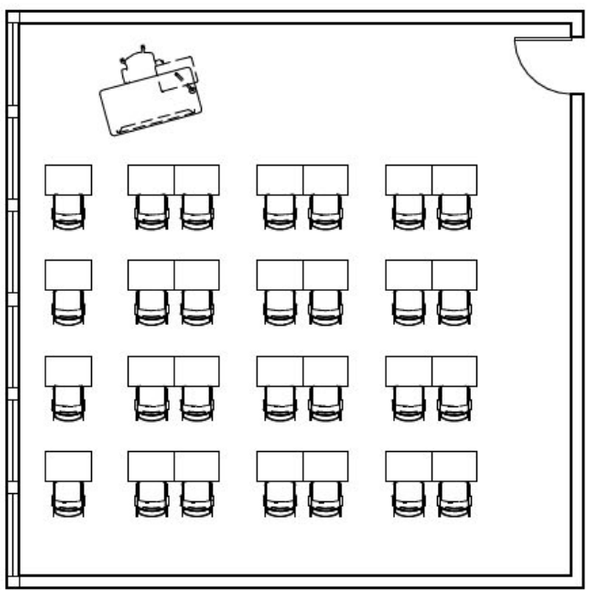
Remove non-essential objects, manipulatives, and books from rooms to aid in cleaning procedures.



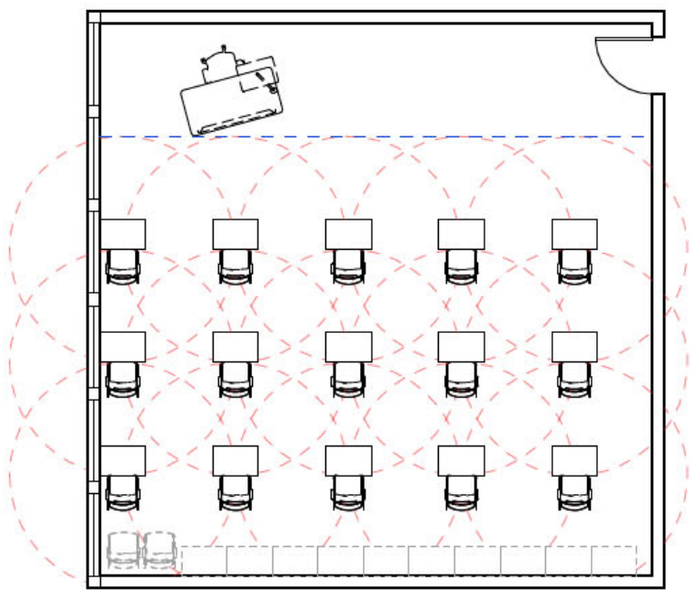
How much is classroom capacity reduced?

EXAMPLE: In a typical high school / middle school classroom...

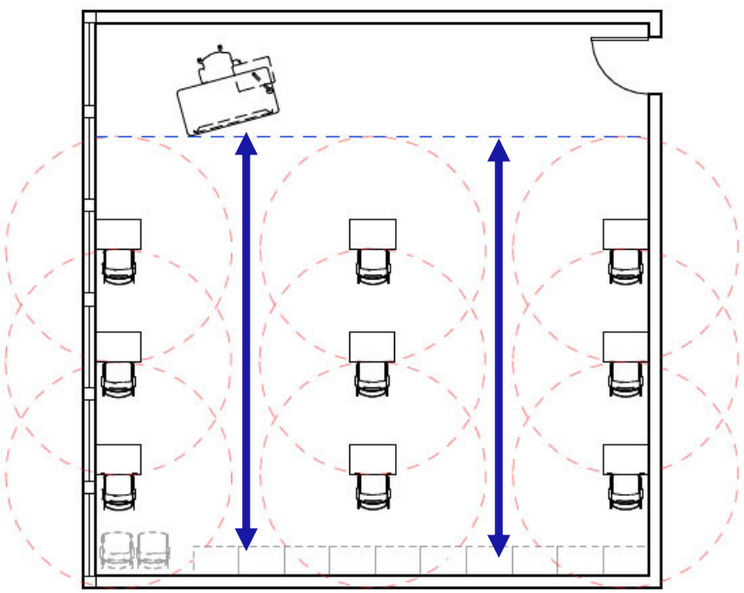
Pre-pandemic
900 SF (30'x30')
No social distancing
28 students



Minimum requirements
900 SF (30'x30')
6' distancing when seated
Circulation passes through 6' radius
15 students **(-46%)**



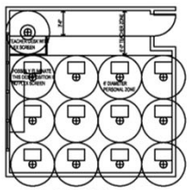
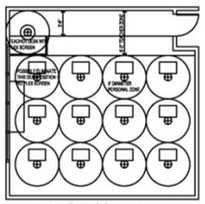
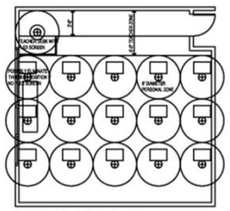
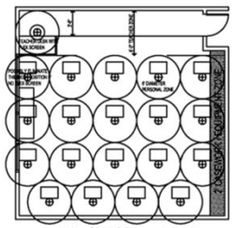
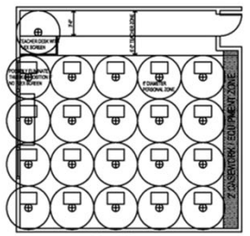
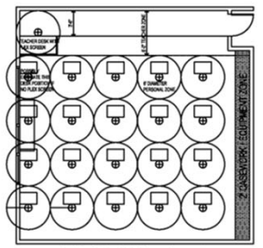
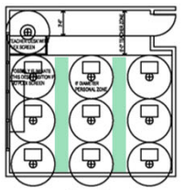
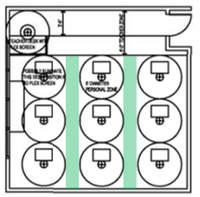
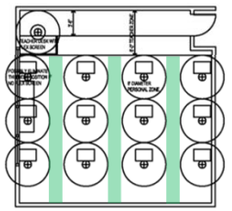
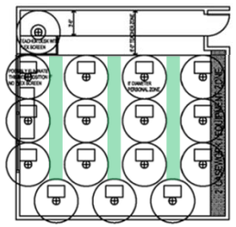
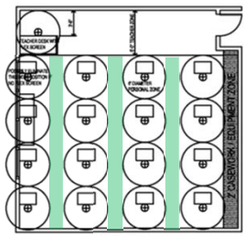
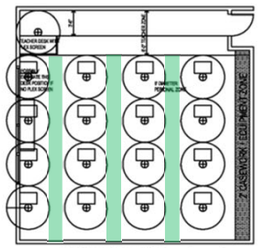
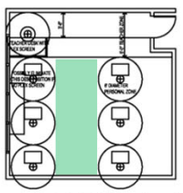
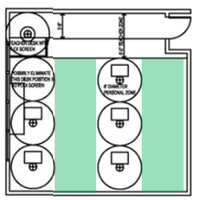
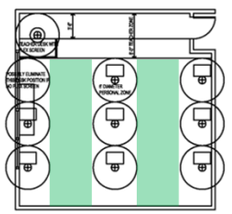
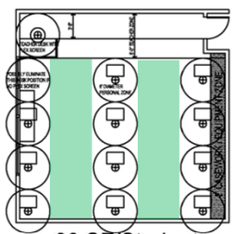
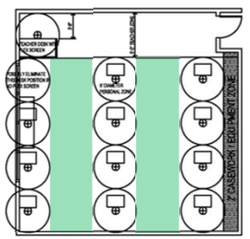
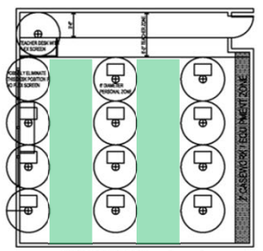
Ideal Scenario
900 SF (30'x30')
6' distancing at all times
Circulation does not pass within 6' radius
9 students **(-68%)**



Classroom Matrix

Studying a variety of classroom sizes and dimensions resulted in an **average 46 SF per student** in classrooms with 6' social distancing between desks without dedicated aisles. Efficiencies will vary based on classroom dimensions, obstructions, and configurations.

6 ft.
Diameter

	500 SF	600 SF	700 SF	800 SF	900 SF	1000 SF
GENERIC SQUARE CLASSROOM WITH NO AISLES AVE 46 SF/STUDENT	 41 SF/Student	 50 SF/Student	 46 SF/Student	 42 SF/Student	 45 SF/Student	 50 SF/Student
GENERIC SQUARE CLASSROOM WITH 24" AISLES AVE 59 SF/STUDENT	 55 SF/Student	 67 SF/Student	 58 SF/Student	 53 SF/Student	 56 SF/Student	 62.5 SF/Student
GENERIC SQUARE CLASSROOM WITH 72" AISLES AVE 79 SF/STUDENT	 83 SF/Student	 100 SF/Student	 77 SF/Student	 66 SF/Student	 75 SF/Student	 83 SF/Student

Classroom Usage Guidelines

- Have students **enter and exit the room in order** of their desk's distance from the door to minimize passing in close physical distance
- **Disinfect student desks** before and after each use. Involve students in the disinfection process.
- **Disinfect teacher desks** between every class period if teachers are rotating between classrooms
- Expect students to break the rules of physical distancing in the classroom, either on purpose or by accident

For Reference: RE-populated Classroom Images from Other Countries

Germany
Aisle marks on the floor and desks against the wall

Germany
Alternating occupied and unoccupied desks

China
Students wear hats to promote distance

Copenhagen
Wide aisles and spaced out desks in Copenhagen

Administrative Spaces

Offices

- Provide 6’ distance around all occupied seats
- Depending on the size of the office, guest chairs may be unusable

Occupy

Unavailable

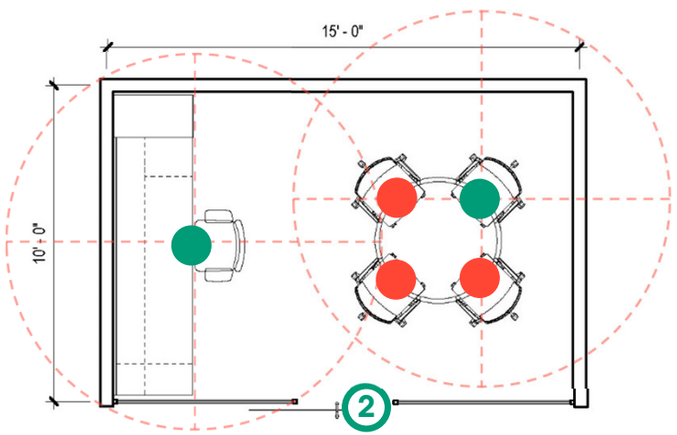
Room Limit

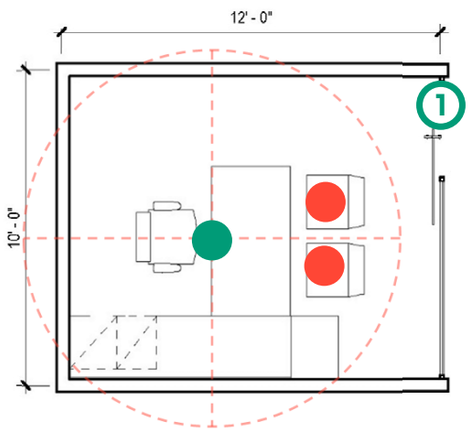
6 ft. guide

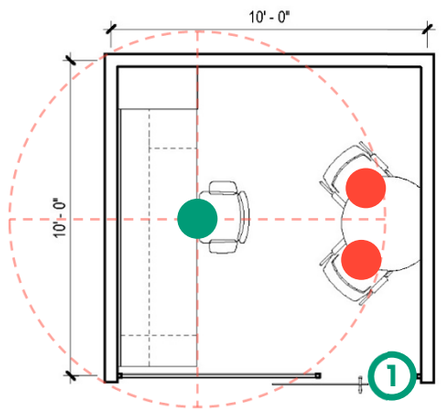
6 ft. Radius

6 ft. radius circle is placed at a practical stationary work position (**chair location will vary on plans**)

Diagrams shown are reference examples. Analysis of your specific furniture may differ.

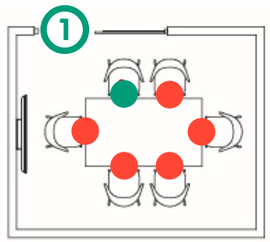




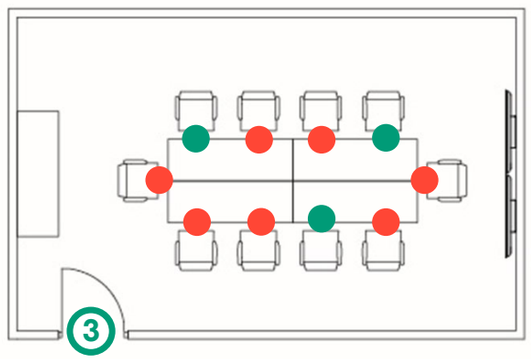


Conference Rooms

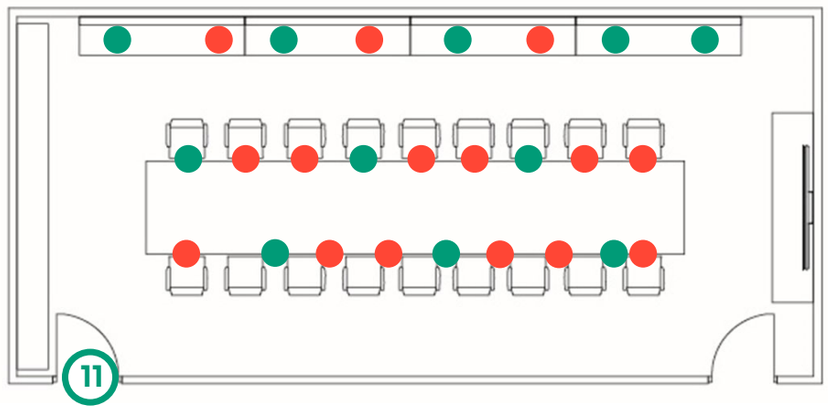
- Provide 6’ distancing between all conference seats when in use
- Mark available and unavailable positions on the table using tape or signage



Small Meeting Room

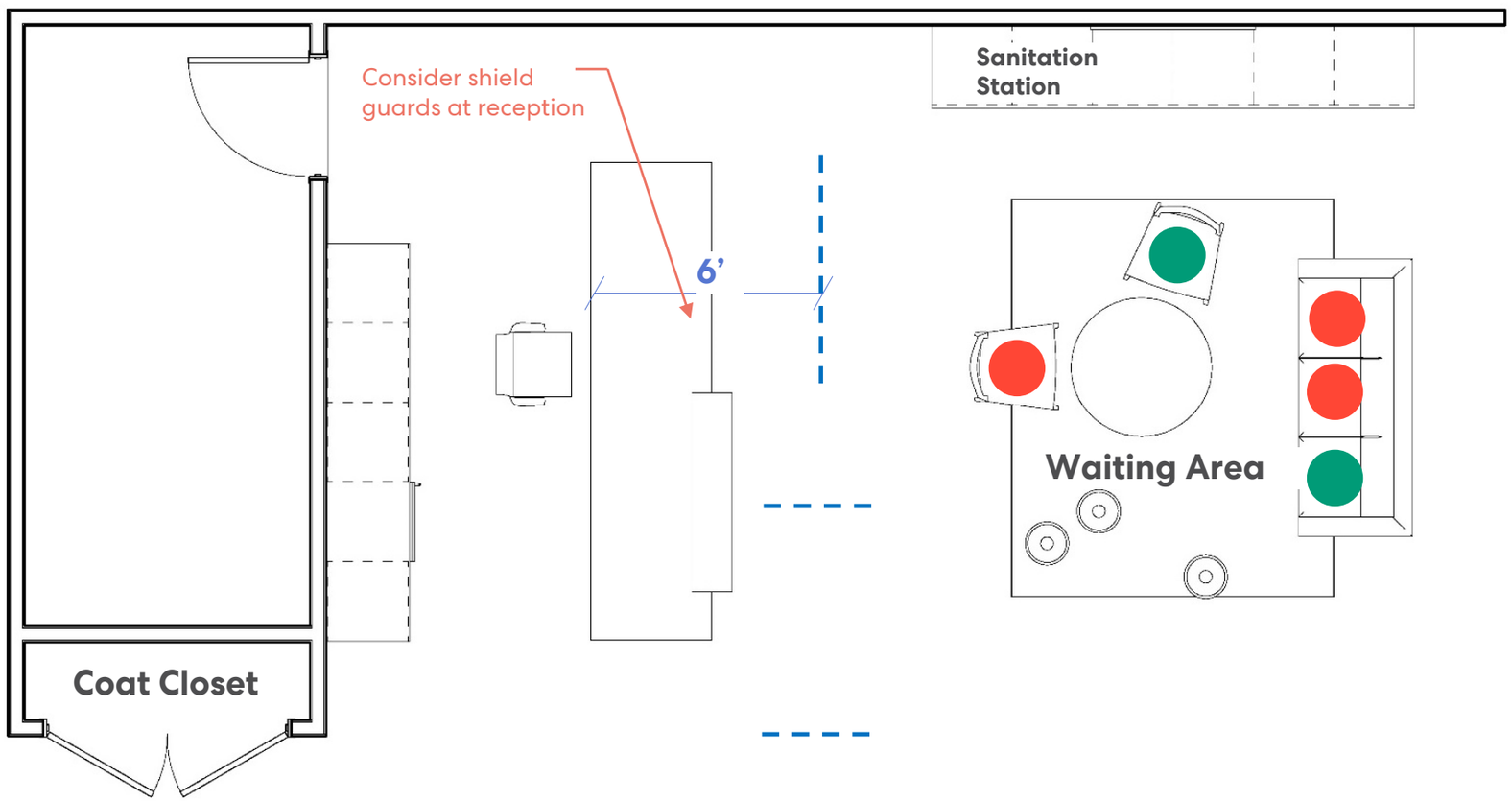


Medium Meeting Room



Large Meeting Room

Reception



Reception Congestion Points:

- Entry / Exit Door
- Reception Desk
- Closet
- Waiting Area
- Sanitation Station
- Nearest Restroom

Shared Spaces

Cafeteria

Layout

- Provide **6’ distance** around all occupiable seats
- **Mark** available and unavailable positions on the tables using tape and/or signage
- Add **shields** at payment and checkout points
- Consider creating **instructional areas** in the cafeteria to increase the teaching capacity of the facility
- Designate **sanitizing and handwashing** areas
- Post **signage** reminding students of healthy behaviors and handwashing

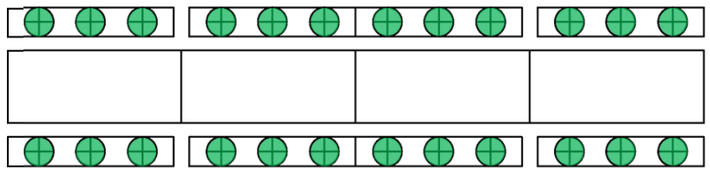
Operations

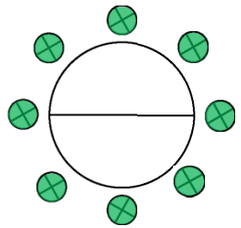
- Have students **eat in their classrooms** if possible
- Provide single **individually wrapped** portions
- Use only **disposable** wares

Cafeteria

6 ft.
Diameter

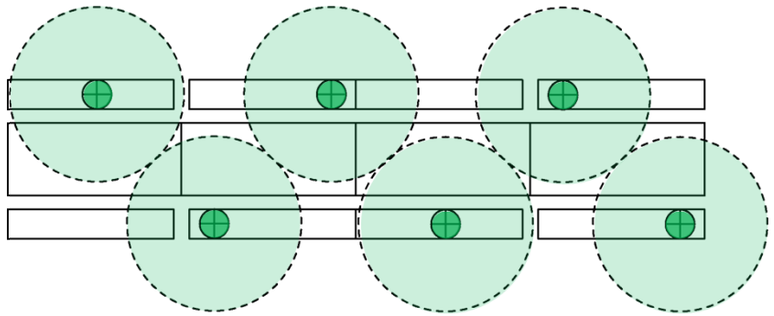
PRE-PANDEMIC
Typical 30" x 12' folding table
Capacity 12/table
100%

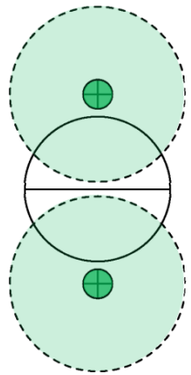




PRE-PANDEMIC
Typical 60" folding table
Capacity 8/table
100%

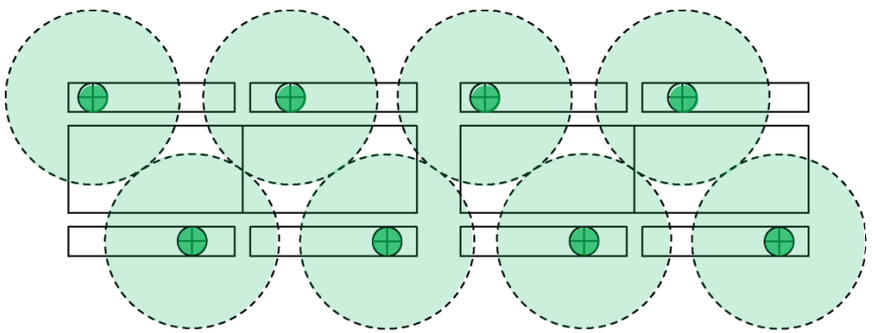
SOCIAL DISTANCING
Typical 30" x 12' folding table
Capacity 3/table
25% pre-pandemic capacity

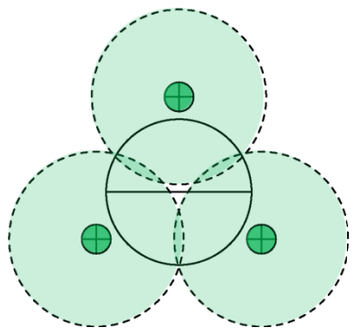




SOCIAL DISTANCING
Typical 60" folding table
Capacity 2/table
25% pre-pandemic capacity

SOCIAL DISTANCING
Typical 36" x 12' folding table
Capacity 4/table
33% pre-pandemic capacity





SOCIAL DISTANCING
Typical 60" folding table
Slightly overlapping circles
Capacity 3/table
37% pre-pandemic capacity

Gym

- Whenever possible, **hold PE classes outside** to allow for maximum physical distance between students
- Avoid any activities that would bring students into close **physical contact**
- Due to the level of movement and heavier breathing, **increase the distance** between students to 10’
- Mark **visual indicators** on the floor and/or walls to illustrate 10’ increments
- Consider **repurposing** the gym for instructional space for teaching/ virtual learning to increase the teaching capacity of the building as large events will not likely be taking place
- **Disinfect** equipment after each use
- Avoid activities that would require multiple students to touch or **handle the same equipment** (e.g. basketball)
- Provide sanitizing areas and access to handwashing
- Post signage reminding students of healthy behaviors and handwashing

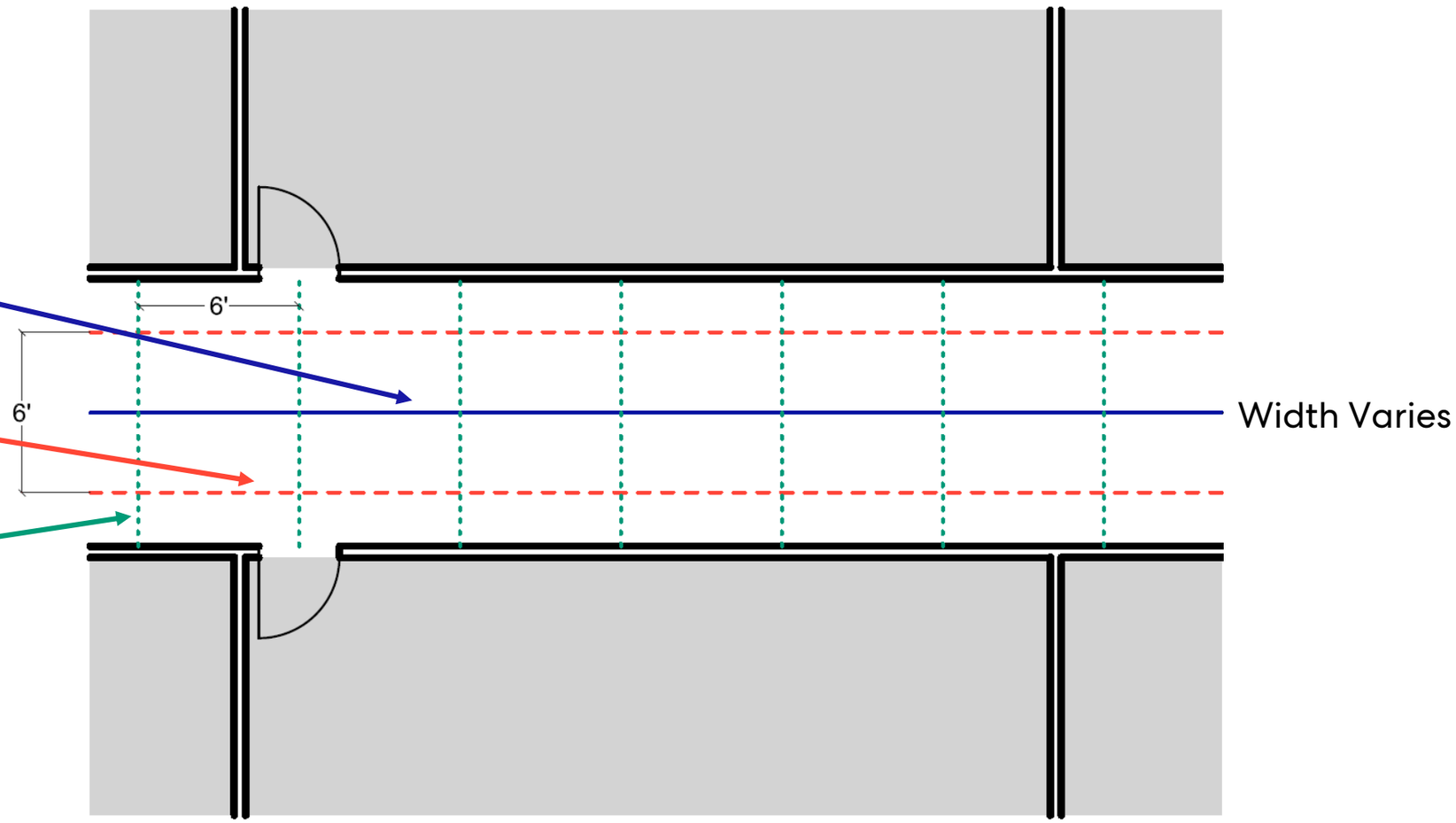
Corridors & Commons

- Maintaining distances of 6’ between students in corridors may not be feasible for all schools
- Mark 6’ distances on the floor and/or walls to provide **visual indicators** for students and teachers as they move through the corridor
- If possible, **discontinue the use of lockers** and cubbies until physical distancing recommendations have been lifted
- If it is not possible to discontinue the use of lockers, determine which students have lockers 6’ apart and **schedule times for locker access** based on where student lockers are located
- Post **signage** reminding students of healthy behaviors and handwashing
- Provide **sanitizing stations** throughout
- DO NOT institute any corridor usage policies or circulation paths that would disrupt **emergency egress routes** or prevent students from seeking the nearest exit, or confuse students in the event of an emergency

Corridors

Create **visual cues** to help students maintain physical distances:

- **Mark a centerline down the middle of the corridor on the floor**
- **Mark paths on the floor 6’ apart on either side of the centerline**
- **Mark 6’ intervals along the floors and/or walls**



Theater

- If seating is loose, arrange seats to maintain **6’ separation**
- If seating is fixed, **mark or block off seats** as unavailable to maintain 6’ separation
- Refer to government guidelines for **gathering sizes** and numbers of attendees for an event
- Consider repurposing areas of the auditorium for **instructional space** until physical distancing guidelines are lifted, as large events will not likely be taking place
- Provide **sanitizing stations** throughout
- Post **signage** reminding students of healthy behaviors and handwashing

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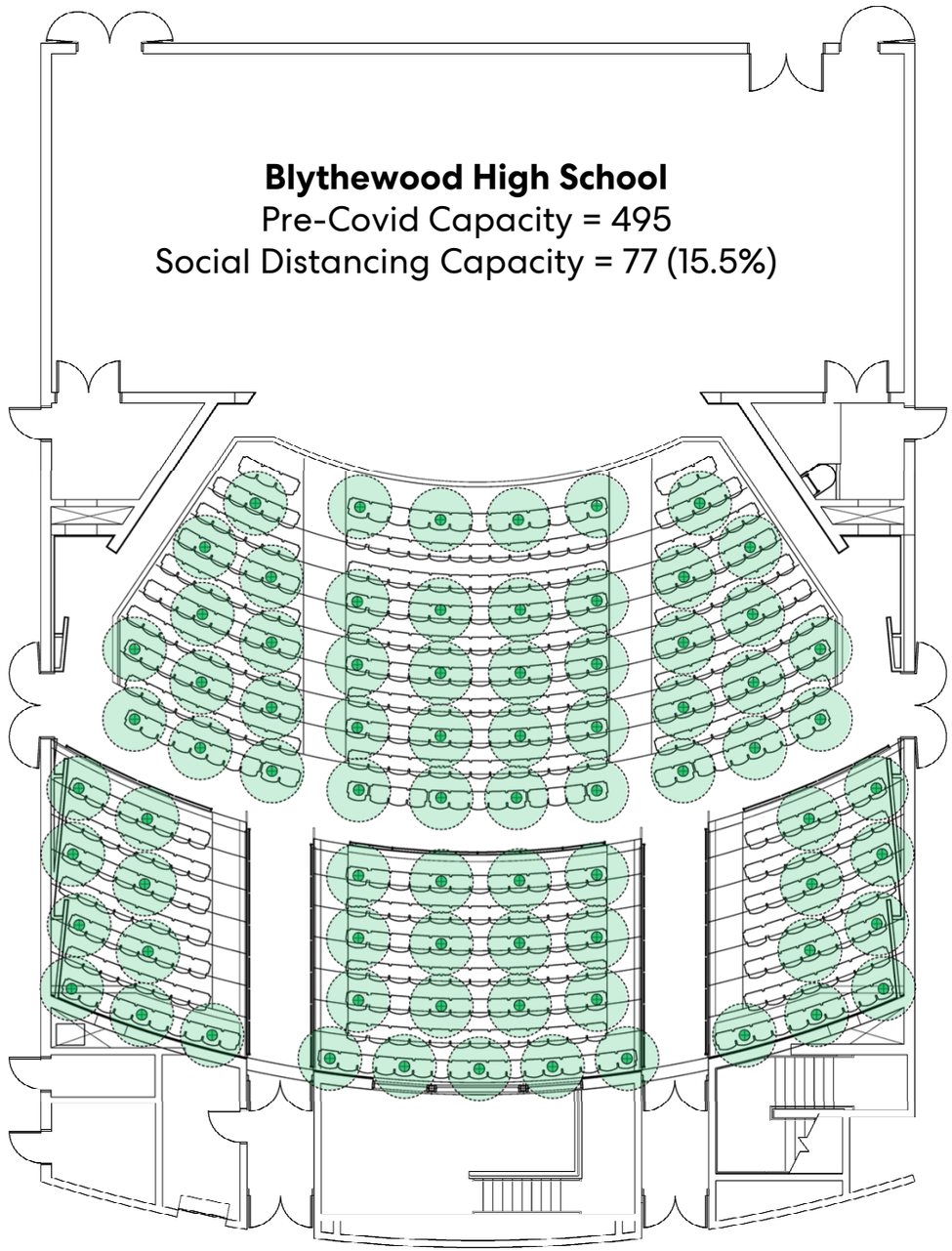
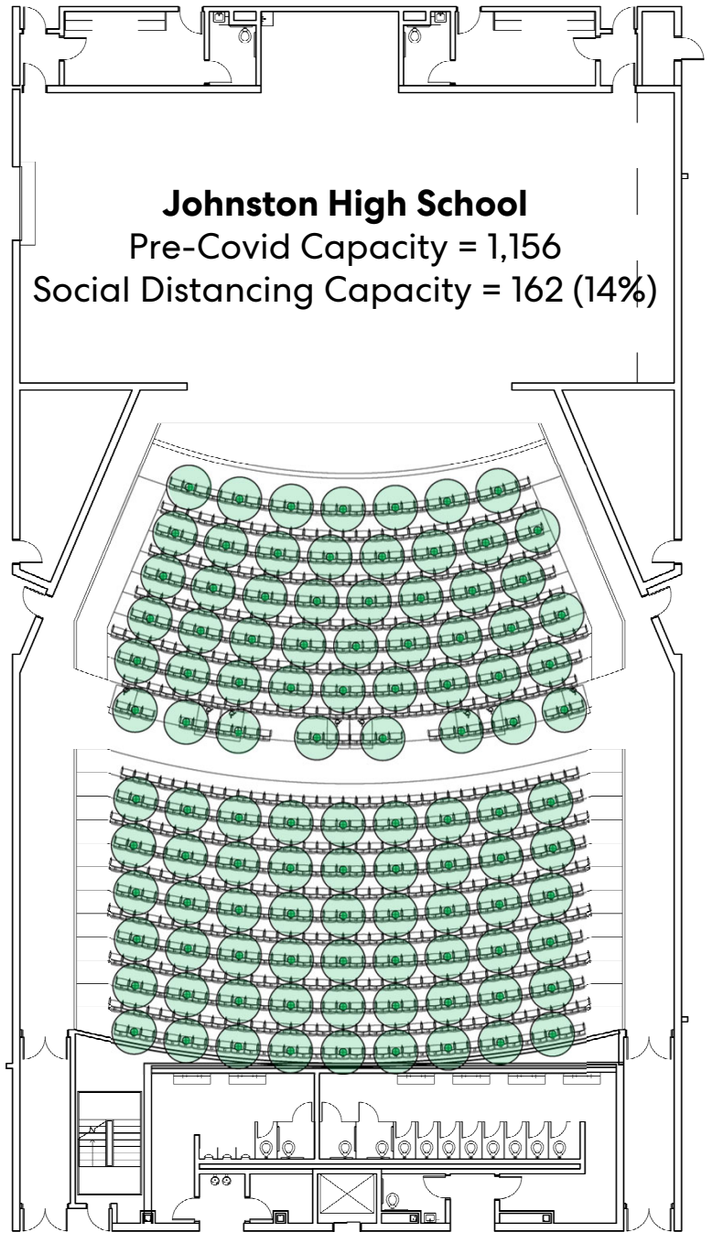
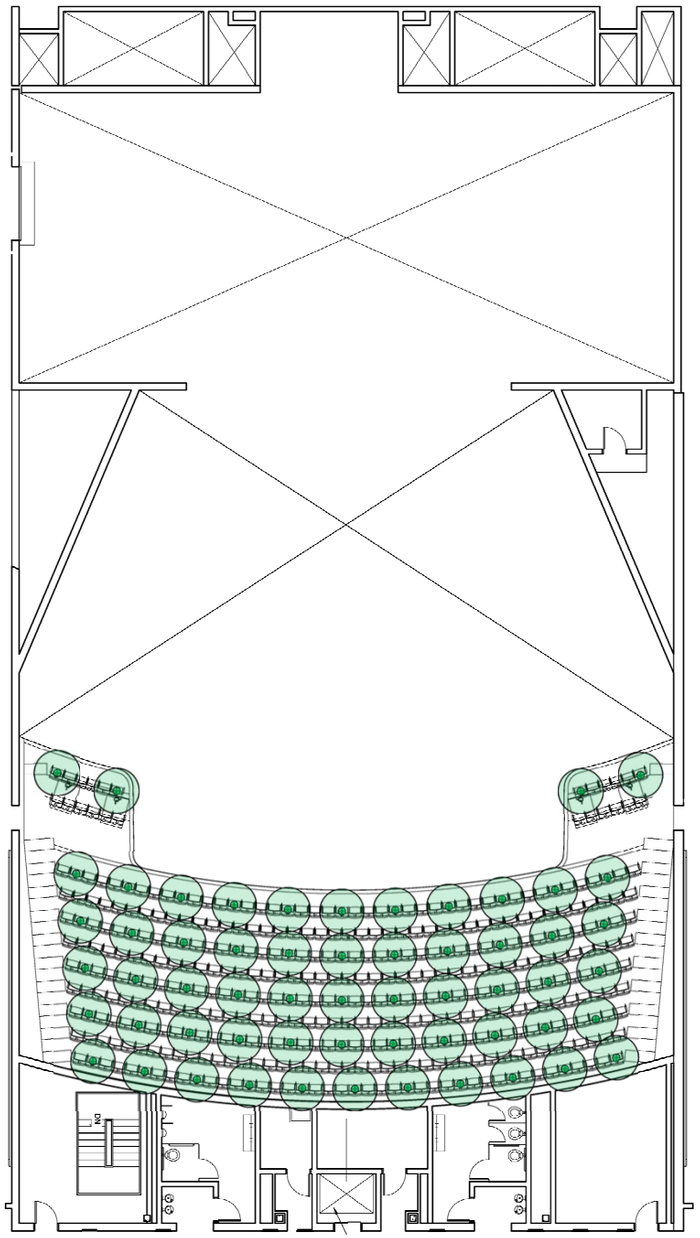
6 ft. Diameter



Theater



Lower Level



Upper Level

6 ft. Diameter

Bus Capacity

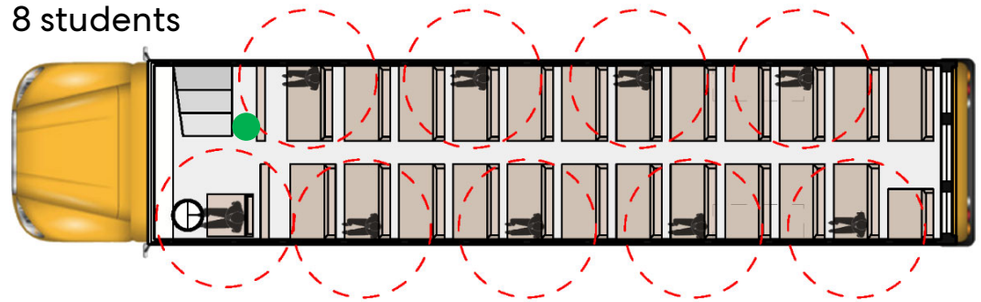
School Bus Capacity

- Maintain 6’ separation between students
- Carefully consider loading and unloading sequence (first student on sits in furthest back seat and is the last student to exit the bus)
- Consider signage or some other means to mark desired seating locations and to restrict access to unused seats
- Typical school buses are nominally 8’ wide, length varies depending on row spacing and capacity
- Wearing of masks while on bus should be considered
- Disinfect between routes
- Consult bus manufacturer for possible ways to shield driver.
- Prepare for increased parent drop-off and pick-up, encourage walking and biking

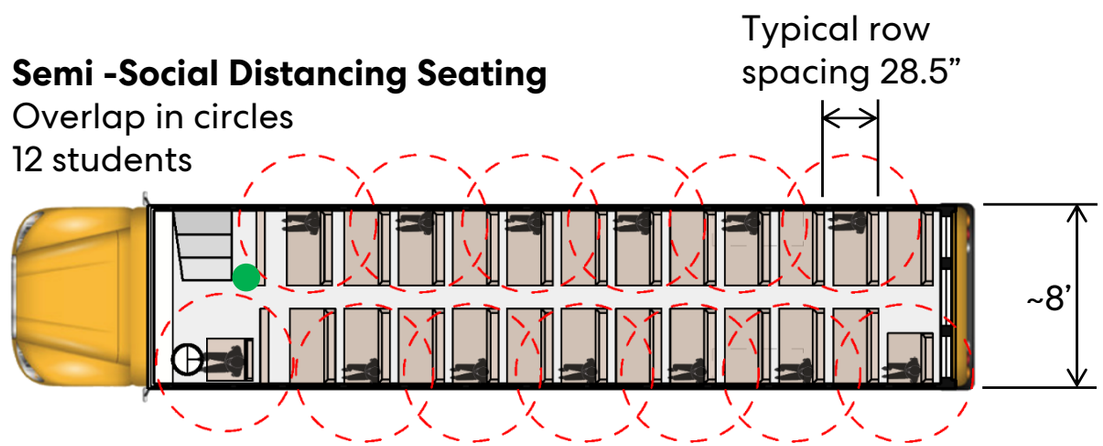
6 ft. Diameter Hand Sanitizer Station

Pre-pandemic Seating
71 students

Social Distancing Seating
No overlap in circles
8 students



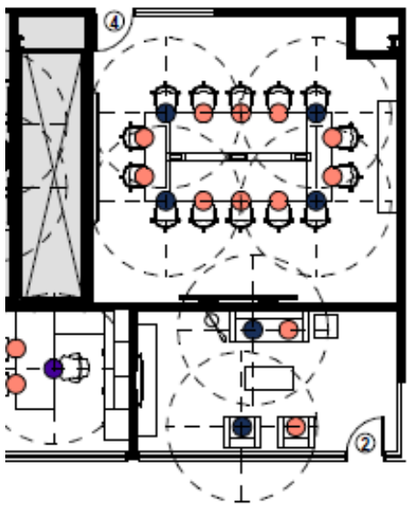
Semi -Social Distancing Seating
Overlap in circles
12 students



Diagrams based on standard BlueBird 71 capacity bus

Environmental Messaging

Graphic Approach



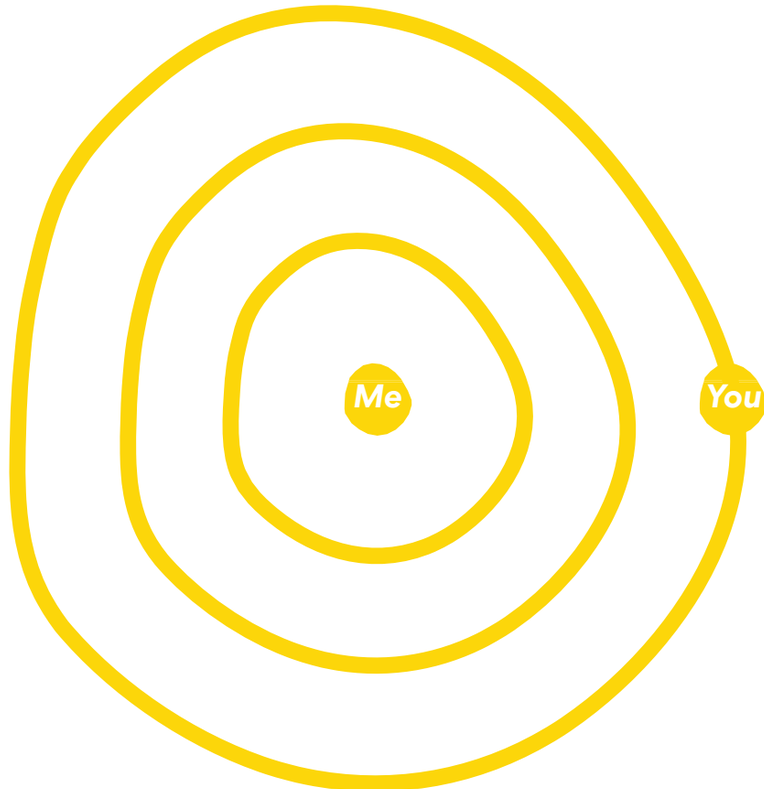
Plan Analysis

Custom Graphics

New Protocols

Graphic Approach

Distancing – Circulation

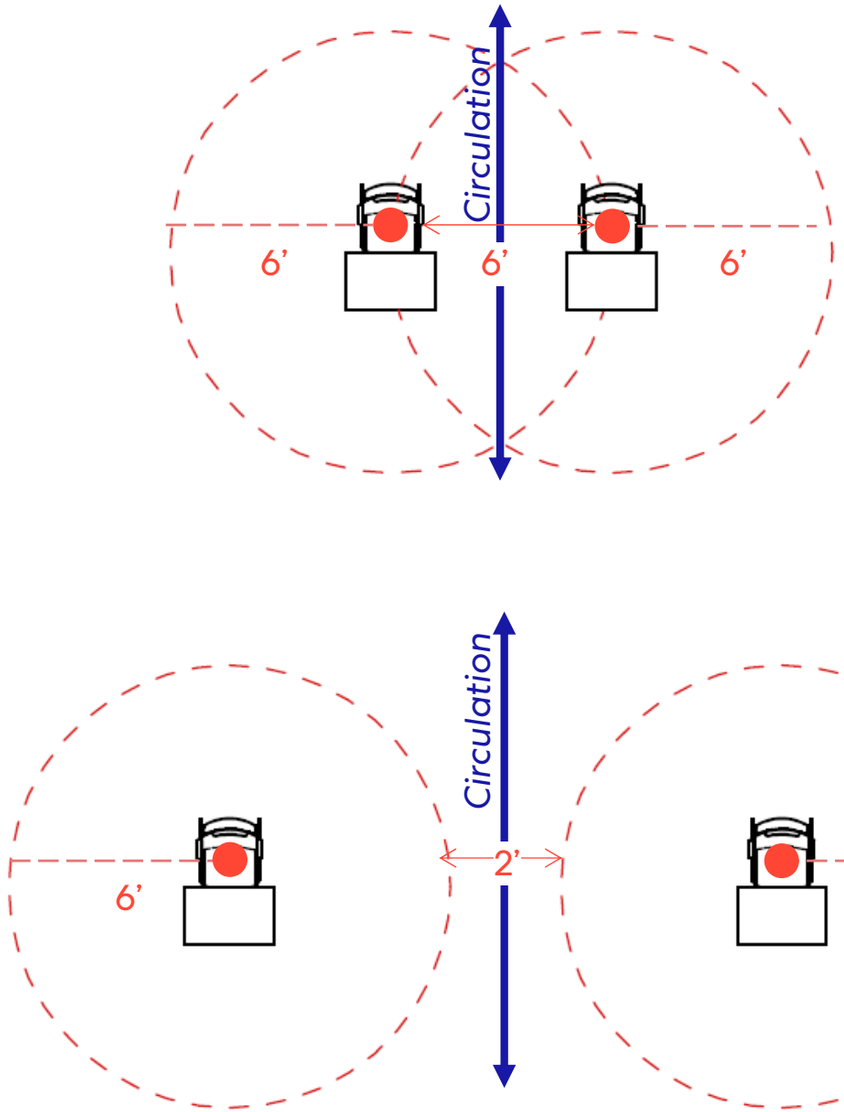


Distancing – Floor Graphic

Capacity Analysis

Guiding Questions / Discussion Starters

- What are the capacity goals? (maximize attendance, maximize safety, etc.)
- With the published guidelines (CDC and others) in mind, what is the desired physical separation for students while seated in an instructional space?
- Should classroom aisles be incorporated? If so, width?
- How might the use of specialized spaces (art, music, PE, locker rooms, tech ed, CTE, science, etc.) at ES, MS, HS levels contribute to capacity?
- Have you discussed alternate schedule strategies that impact where and how much capacity will be necessary?
- Furniture type will have an impact. Do you know what is in your buildings?



Our recommendations are advisory and intended to assist as you plan for the return to school. Guidance is evolving and we urge you to regularly consult with the following sources:

World Health Organization

Centers for Disease Control and Prevention (CDC)

Occupational Safety and Health Administration (OSHA)

Federal, State, and Local Guidance

Version 1.0 is based on recommendations and guidance provided by these sources as of May 20, 2020,

Perkins&Will

We are in this together.